

### IN THE CLAIMS

Please amend the following claims.

543  
a1  
10. (Amended) The multiple antenna system of claim 9, wherein the first parallel tuning circuit increases the electromagnetic isolation between the first and second antennas in multiple frequency bands.

12. (Amended) The multiple antenna system of claim 11, wherein the impedance matching circuit matches an impedance of the second antenna via electromagnetic coupling with the first antenna.

a2  
543  
c1  
13. (Amended) The multiple antenna system of claim 11, wherein the impedance matching circuit matches an impedance of the second antenna.

543  
c1  
a3  
15. (Amended) The multiple antenna system of claim 1 further comprising:  
(d) a second parallel tuning circuit selectively connectable in parallel to the second signal path.

16. (Amended) The multiple antenna system of claim 15, wherein the second parallel tuning circuit increases the electromagnetic isolation between the first and second antennas.

20. (Amended) The multiple antenna system of claim 19, wherein each band tuning circuit creates a different impedance at an input to the first antenna associated with the connection to the first signal circuit.

21. (Amended) The multiple antenna system of claim 19, wherein the first tuning circuit includes a first band tuning circuit having an impedance matched to the second antenna and a second band tuning circuit having an impedance matched to a third antenna.

22. (Amended) The multiple antenna system of claim 19, wherein the first parallel tuning circuit comprises an adjustable impedance based on selectively connecting different ones of the plurality of band tuning circuits with the first signal path.

23. (Amended) The multiple antenna system of claim 19, further comprising a detector to control selective connection of individual ones of the plurality of band tuning circuits with the first signal path.

26. (Amended) A parallel tuning circuit for use in a multiple antenna system, comprising:

- (a) a first impedance matching circuit; and
- (b) a first switch selectively connecting in parallel the first impedance matching circuit with a transmission line connecting a first antenna to a first signal circuit.

27. (Amended) A parallel tuning circuit of claim 26, further comprising:

(a) a second impedance matching circuit; and

(b) a second switch selectively connecting in parallel the second impedance matching circuit with a transmission line connecting a second antenna to a second signal circuit.

28. (Amended) The parallel tuning circuit of claim 26, wherein the first impedance matching circuit matches an impedance of the second antenna.

29. (Amended) The parallel tuning circuit of claim 26, wherein the first impedance matching circuit matches an impedance of the second antenna in multiple frequency bands.

30. (Amended) A method of adjusting impedance in a multiple antenna system, comprising:

(a) detecting whether a first signal source connected with a first antenna via a first signal path is active or inactive;

(b) detecting whether a second signal source connected with a second antenna via a second signal path is active or inactive, wherein the second antenna is proximate to the first antenna; and

(c) selectively connecting a first parallel impedance circuit in parallel with the first signal path if the first signal source is inactive and the second signal source is active to reduce electromagnetic coupling between the second and first antennas.

34. (Amended) The method of claim 33, further comprising:

(d) measuring external interference proximate to the first antenna; and

(e) adjusting the impedance of the first parallel impedance circuit based on the measured external interference.

35. (Amended) The method of claim 33, further comprising:

(d) detecting whether a third signal source connected with a third antenna via a third signal path is active or inactive, wherein the third antenna is proximate to the first antenna; and

(e) selectively connecting a first parallel impedance circuit in parallel with the first signal path if the first signal source is inactive and the third signal source is active to reduce electromagnetic coupling between the third and first antennas.

36. (Amended) The method of claim 33, wherein the first parallel impedance circuit comprises a plurality of selectively connectable parallel impedance circuits, and wherein (c) includes selectively attaching a selected one of the plurality of parallel impedance circuits in parallel with the first signal path.

37. (Amended) The method of claim 33, further including (d) selectively connecting a second parallel impedance circuit with the second signal path if the first signal source is active and the second signal source is inactive to reduce electromagnetic coupling between the first and second antennas.

alp  
SUB  
CI

38. (Amended) The method of claim 33, wherein the first parallel impedance circuit comprises a plurality of parallel impedance circuits, and wherein (c) includes selecting a desired parallel impedance, selecting from the plurality of parallel impedance circuits one or more parallel impedance circuits that most closely match the desired parallel impedance, and attaching the one or more selected parallel impedance circuits in parallel with the first signal path.

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Please add the following claims:

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39. A multiple antenna system comprising:

- (a) a first antenna connected to a first signal circuit via a first signal path;
- (b) a second antenna proximate the first antenna connected to a second signal circuit via a second signal path; and
- (c) a first parallel tuning circuit selectively connectable in parallel with the first signal path, wherein the first parallel tuning circuit increases the electromagnetic isolation between the first and second antennas.

40. The multiple antenna system of claim 39 wherein the second signal circuit generates signals in multiple frequency bands.

41. The multiple antenna system of claim 40 wherein the first parallel tuning circuit increases isolation between the first and second antennas in multiple frequency bands.

42. The multiple antenna system of claim 39 wherein the first parallel tuning circuit includes an impedance matching circuit.

43. The multiple antenna system of claim 42 wherein the impedance matching circuit matches an impedance of the second antenna via electromagnetic coupling with the first antenna.

44. The multiple antenna system of claim 42 wherein the first tuning circuit includes a plurality of impedance matching circuits, each impedance matching circuit being independently selectively connectable in parallel to the first signal path.

45. The multiple antenna system of claim 39 further comprising:

(d) a second parallel tuning circuit selectively connectable in parallel to the second signal path.

46. The multiple antenna system of claim 45, wherein the second parallel tuning circuit increases the electromagnetic isolation between the first and second antennas.

47. The multiple antenna system of claim 39 wherein the first tuning circuit creates an impedance at an input of the first antenna substantially equivalent to an open circuit at the transmission frequency of the second antenna.

48. The multiple antenna system of claim 39 wherein the first parallel tuning circuit includes a plurality of band tuning circuits, each band tuning circuit being independently selectively coupled with the first signal path.

49. The multiple antenna system of claim 48 wherein each band tuning circuit creates a different impedance at an input to the first antenna associated with the connection to the first signal circuit.

50. The multiple antenna system of claim 49, wherein the first tuning circuit includes a first band tuning circuit having an impedance matched to the second antenna and a second band tuning circuit having an impedance matched to a third antenna.

an 51. The multiple antenna system of claim 48 wherein the first parallel tuning circuit comprises an adjustable impedance based on selectively connecting different ones of the plurality of band tuning circuits with the first signal path.

52. The multiple antenna system of claim 48 further comprising a detector to control selective connection of individual ones of the plurality of band tuning circuits with the first signal path.

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